

Nuclear Waste Program Summary 2005 – 2007 Program Plan

Program Mission: To lead the effective and efficient clean up of the United States Department of Energy's Hanford Site; to ensure sound management of mixed hazardous wastes in Washington; and, to protect the state's air, water and land at and adjacent to the Hanford site.

| Priority of Washington State: Improve the Quality of Natural Resources. | | | |
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| Activity What We Do | Desired Results What We Want To Achieve | Strategies How We Will Do It | Accountability Measures How We Will Measure Success |
| Hanford Waste Management: Safe management, including storage, treatment, and disposal of radioactive mixed waste at the Hanford Site and Non-Hanford facilities | <ul style="list-style-type: none"> • Complete the investigation of the US Ecology site by 2008. • Complete reviews and modifications of the Hanford Low Level Burial Ground permit. • Continue Transuranic waste shipments to the Waste Isolation Pilot Plant to reduce hazards and environmental impact on Hanford. | <ul style="list-style-type: none"> • Provide technical support in the selection and development of groundwater monitoring to support the Remedial Investigation/ Feasibility Study • Complete Notice of Deficiency workshops by August 2005 • Continued tracking of Tri-Party Agreement M-91 milestones for storage, treatment, processing and disposal | <ul style="list-style-type: none"> • Issuance of a Record of Decision amendment for the Hanford UP-1 interest area. • Groundwater Monitoring and Closure Plans completed by December 2005 • Shipment of Contact Handled Transuranic waste from Hanford to Waste Isolation Pilot Plant. |
| Hanford Facility Transition: Decommission large complex facilities throughout Hanford which require coordination of multiple regulatory and technical requirements for transition to safe and stable conditions. | <ul style="list-style-type: none"> • Transition all of Hanford's 100 Area reactors to Interim Safe Storage by 2012. • Transition Hanford's 300 Area by 2015 • Hanford Plutonium Finishing Plant (PFP) – Complete transition of PFP by 2016. • Decommission Fast Flux Test Facility (FFTF) by 2011. • Off-Hanford Facility - Framatome ponds – Close the storage lagoons by August 2006 | <ul style="list-style-type: none"> • Ensure compliance with requirement to complete Interim Safe Storage (ISS) process at the 105-H reactor by December 31, 2005. • Approve a schedule for disposition of surplus facilities in the 300 Area by December 2005. • Ensure transition of the PFP 232-Z building by September 2006. • Ensure completion of FFTF sodium drain by Sept 2009. • Ensure compliance with the closure schedule included in the Framatome consent decree. | <ul style="list-style-type: none"> • 105-H Reactor will be in a safe and stable condition until final disposition. • USDOE will begin disposition of 300 Area facilities per the approved schedule. • 232-Z Building transitioned to Slab-on-Grade. • All sodium drained from FFTF reactor. • Close the Framatome storage lagoons by August 8, 2006. |

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| Hanford Tank Waste Storage: Ensure safe tank operations and safe storage of tank wastes leading to closure of 177 Hanford tanks by 2028. | <ul style="list-style-type: none"> • Improve safety of Double Shell Tank (DST) System operations through permitting of the system by July 2006. • Complete development of the Single Shell Tank (SST) System Closure Plan before completion of the Tank Waste Comprehensive Environmental Impact Statement (June 2007) • Complete retrieval of the Hanford "C"-SST Farm | <ul style="list-style-type: none"> • Review the permit application, write the permit, and issue the permit by July 2006. • Review, approve, and issue the draft closure plan for public comment on schedule • Review and provide comment for retrieval data reports, as submitted. | <ul style="list-style-type: none"> • The DST system will be operated under specific permit requirements rather than the current interim status requirements. • Three large and four small single shell tanks will be empty, interim closed, and ready for final closure by June 2005 • "C"-SST Farm will be retrieved and prepared for further closure actions. |
| Hanford Tank Waste Disposal: Treat and dispose Hanford's High Level Radioactive Tank Waste by 2028. | <ul style="list-style-type: none"> • Complete hot commissioning of the Hanford Tank Waste Treatment Facility by January 2011. • Develop and begin implementing an approach to treat low activity tank waste that will not be treated in the Waste Treatment Plant by December 2006. • Establish a system for interim storage and transportation of immobilized high level tank waste, and disposal of immobilized low activity tank waste. | <ul style="list-style-type: none"> • All treatment plant permit packages and permit modifications submitted by USDOE are reviewed and approved by Ecology. • Develop and implement a decision matrix for treatment selection and support document review required in the research and development permit for supplemental treatment of low activity tank waste.. • Support permitting of storage and disposal facilities | <ul style="list-style-type: none"> • Construction of the Waste Treatment Facility continues on the critical path schedule. • Complete Ecology's evaluation and decision on additional low activity treatment technologies by December 2006. • Integrated Disposal Facility and Canister Storage building proceed on schedule |

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| Hanford Environmental Restoration: Restore the public use of the air, soil and water at Hanford and remove or reduce the risks associated with past Hanford activities to people and the environment. | <ul style="list-style-type: none"> • Clean Hanford's 100 Areas, which are along the Columbia River, to allow for unrestricted surface use by 2012, and to prevent further groundwater contamination. The objective for contaminated groundwater is to restore the groundwater to its highest beneficial use by 2018. • The target for Hanford's 200 Area soil waste sites, which are on the central plateau, is to prevent contaminant spread by stabilizing existing contamination by 2024. The target for groundwater is to restore it to its highest beneficial use by 2024 through implementation of the Hanford Groundwater Strategy. • The target for Hanford's waste sites and facilities adjacent to north Richland (300 Area) is to remediate groundwater by 2018. | <ul style="list-style-type: none"> • Annual revision & approval of remedial action workplans to authorize on-going cleanup activities, consistent with current cleanup standards and best available technologies • Approve remedial design for 3 high risk waste sites by March 2006. Approve in 2005, an Action Memo to authorize cleanup at 60 shallow soil waste sites. Approve all Remedial Investigation/Feasibility Study reports by 2008. • Review the groundwater feasibility study in 2007, review and approve a revised monitoring network in 2007, and review and approve a groundwater cleanup plan by 2012. | <ul style="list-style-type: none"> • Remove and dispose of 500,000 tons of contaminated soil per year. • Remediate 3 sites that are high risk to groundwater by Sept. 2006. Close out 20 waste sites (out of 700 total) per year each year. Complete cleanup of Hanford 200 Area soil waste sites by 2024. • Groundwater cleanup alternative is identified in 2007, a network to monitor cleanup progress is approved in 2007, and cleanup starts by 2012. |